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<140> US 09/115,832
<141> 1998-07-15

<150> US 60/052,870
<151> 1997-07-16

<150> US 60/055,952
<151> 1997-08-18

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cac aac ctg ctg ttt ctt ctt acc att tcc atc ttc ctg ggg ctg ggc   104
His Asn Leu Leu Phe Leu Leu Thr Ile Ser Ile Phe Leu Gly Leu Gly
   -15   -10   -5   -1

cag ccc agg agc ccc aaa agc aag agg aag ggg caa ggg cgg cct ggg   152
Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys Gly Gln Gly Arg Pro Gly
1   5   10   15

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ccc ctg gcc cct ggc cct cac cag gtg cca ctg gac ctg gtg tca cgg      200
Pro Leu Ala Pro Gly Pro His Gln Val Pro Leu Asp Leu Val Ser Arg
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atg aaa ccg tat gcc cgc atg gag gag tat gag agg aac atc gag gag      248
Met Lys Pro Tyr Ala Arg Met Glu Glu Tyr Glu Arg Asn Ile Glu Glu
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atg gtg gcc cag ctg agg aac agc tca gag ctg gcc cag aga aag tgt      296
Met Val Ala Gln Leu Arg Asn Ser Ser Glu Leu Ala Gln Arg Lys Cys
            50                  55                  60

gag gtc aac ttg cag ctg tgg atg tcc aac aag agg agc ctg tct ccc      344
Glu Val Asn Leu Gln Leu Trp Met Ser Asn Lys Arg Ser Leu Ser Pro
65                  70                  75                  80

tgg ggc tac agc atc aac cac gac ccc agc cgt atc ccc gtg gac ctg      392
Trp Gly Tyr Ser Ile Asn His Asp Pro Ser Arg Ile Pro Val Asp Leu
                    85                  90                  95

ccg gag gca cgg tgc ctg tgt ctg ggc tgt gtg aac ccc ttc acc atg      440
Pro Glu Ala Arg Cys Leu Cys Leu Gly Cys Val Asn Pro Phe Thr Met
            100                 105                 110

cag gag gac cgc agc atg gtg agc gtg ccg gtg ttc agc cag gtt cct      488
Gln Glu Asp Arg Ser Met Val Ser Val Pro Val Phe Ser Gln Val Pro
            115                 120                 125

gtg cgc cgc cgc ctc tgc ccg cca ccg ccc cgc aca ggg cct tgc cgc      536
Val Arg Arg Arg Leu Cys Pro Pro Pro Arg Thr Gly Pro Cys Arg
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cag cgc gca gtc atg gag acc atc gct gtg ggc tgc acc tgc atc ttc      584
Gln Arg Ala Val Met Glu Thr Ile Ala Val Gly Cys Thr Cys Ile Phe
145                 150                 155                 160

tgaattacct ggcccagaag ccaggccagc agcccgagac catcctcctt gcacctttgt      644

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Leu Gly Leu Gly Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys Gly Gln
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Gly Arg Pro Gly Pro Leu Ala Pro Gly Pro His Gln Val Pro Leu Asp
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Leu Val Ser Arg Met Lys Pro Tyr Ala Arg Met Glu Glu Tyr Glu Arg
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Asn Ile Glu Glu Met Val Ala Gln Leu Arg Asn Ser Ser Glu Leu Ala
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Gln Arg Lys Cys Glu Val Asn Leu Gln Leu Trp Met Ser Asn Lys Arg
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Ser Leu Ser Pro Trp Gly Tyr Ser Ile Asn His Asp Pro Ser Arg Ile
            80   85   90

Pro Val Asp Leu Pro Glu Ala Arg Cys Leu Cys Leu Gly Cys Val Asn
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Pro Phe Thr Met Gln Glu Asp Arg Ser Met Val Ser Val Pro Val Phe
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Ser Gln Val Pro Val Arg Arg Arg Leu Cys Pro Pro Pro Arg Thr
125   130   135   140

Gly Pro Cys Arg Gln Arg Ala Val Met Glu Thr Ile Ala Val Gly Cys
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Thr Cys Ile Phe
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Cys Pro Asn Ser Glu Asp Lys Asn Phe Pro Arg Thr Val Met Val Asn
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Leu Asn Ile His Asn Arg Asn Thr Asn Thr Asn Pro Lys Arg Ser Ser
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Asp Tyr Tyr Asn Arg Ser Thr Ser Pro Trp Asn Leu His Arg Asn Glu
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Asp Pro Glu Arg Tyr Pro Ser Val Ile Trp Glu Ala Lys Cys Arg His
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Leu Gly Cys Ile Asn Ala Asp Gly Asn Val Asp Tyr His Met Asn Ser
            100             105             110

Val Pro Ile Gln Gln Glu Ile Leu Val Leu Arg Arg Glu Pro Pro His
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Cys Pro Asn Ser Phe Arg Leu Glu Lys Ile Leu Val Ser Val Gly Cys
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Thr Cys Val Thr Pro Ile Val His His Val Ala
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cccaggagcc ccaaaagcaa gaggaagggg caagggcggc ctgggcccct ggncctggnc   180

ctcaccaggt gccactggac ctggtgtcac ggntgaaacc gtatgcccgc atggaggagt   240

atgagaggaa catcgaggag atggtggccc agctgaggaa cagctcanag ctgggcccag   300

agaaagtttg angntcaact ttncaagctt ntgggtnttn caacaagnag gtagcctgtt   360

ttncntggng gttannagta tgaatncaag nancncangc gtnnntncng ttngnncttn   420

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       Mol. Biol. 196:947-950 (1987))

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Gly Arg Pro Gly Pro Leu Ala Pro Gly Pro His Gln Val Pro Leu Asp
        35   40   45

Leu Val Ser Arg Met Lys Pro Tyr Ala Arg Met Glu Glu Tyr Glu Arg
    50   55   60

Asn Ile Glu Glu Met Val Ala Gln Leu Arg Asn Ser Ser Glu Leu Ala
65   70   75   80

Gln Arg Lys Cys Glu Val Asn Leu Gln Leu Trp Met Ser Asn Lys Arg
                85   90   95

Ser Leu Ser Pro Trp Gly Tyr Ser Ile Asn His Asp Pro Ser Arg Ile
                100   105   110

Pro Val Asp Leu Pro Glu His Gly Ala Cys Val Trp Ala Val
                115   120   125